

IDEM UPDATE

Indiana Chamber of Commerce 2016 Indiana Environmental Conference

October 21, 2016

Carol S. Comer, Commissioner
Indiana Department of Environmental Management

IDEM: Protecting Hoosiers and Our Environment While Becoming the Most Customer-Friendly Environmental Agency

IDEM's mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial and governmental activities vital to a prosperous economy.

How Does IDEM Protect Hoosiers and Our Environment?

- Developing regulations and issuing permits to restrict discharges to environmentally safe levels.
- Inspecting and monitoring permitted facilities to ensure compliance with permits.
- Using compliance assistance and/or enforcement when facilities exceed their permit levels or violate regulations.
- Educating people on their environmental responsibilities.
- Cleaning up contaminated sites to eliminate public exposure to toxics and returning properties to productive use.

Performance Metrics October 2016

	Result	Targets	Comments	
Quality of Hoosiers' Environment				
% of Hoosiers that live in counties that meet air quality standards	93.04%	100%	80%	Ozone in Clark, Floyd, Greene and LaPorte Counties; Muncie Lead; Sulfur Dioxide in parts of Daviess, Marion, Morgan, Pike and Vigo Counties.
% of CSO Communities with approved programs to prevent the release of untreated sewage	98.17%	100%	90%	98+9 (107) out of 99+10 (109). Not Gary or Hammond.
% of Hoosiers that receive water from facilities in full compliance with safe drinking water standards	98.49%	99%	95%	Still dealing with the implementation of Stage2 Disinfection/Disinfectant ByProducts Rule affecting medium and small size public water systems that sell and purchase water; the Maximum Contaminant Level (MCL) for Total Trihalomethane and Haloacetic Acid cannot be met.

Permitting Efficiency

Total calendar days accumulated in issuing environmental permits, as determined by state statute*

Land	25,045	30,388	33,963	35,750 statutory
Air	32,658	52,890	59,112	62,223 statutory
Water	36,380	65,153	72,818	76,650 statutory

* Places emphasis on back logged permits

Compliance

Total percentage of compliance observations from regulated customers within acceptable compliance standards**

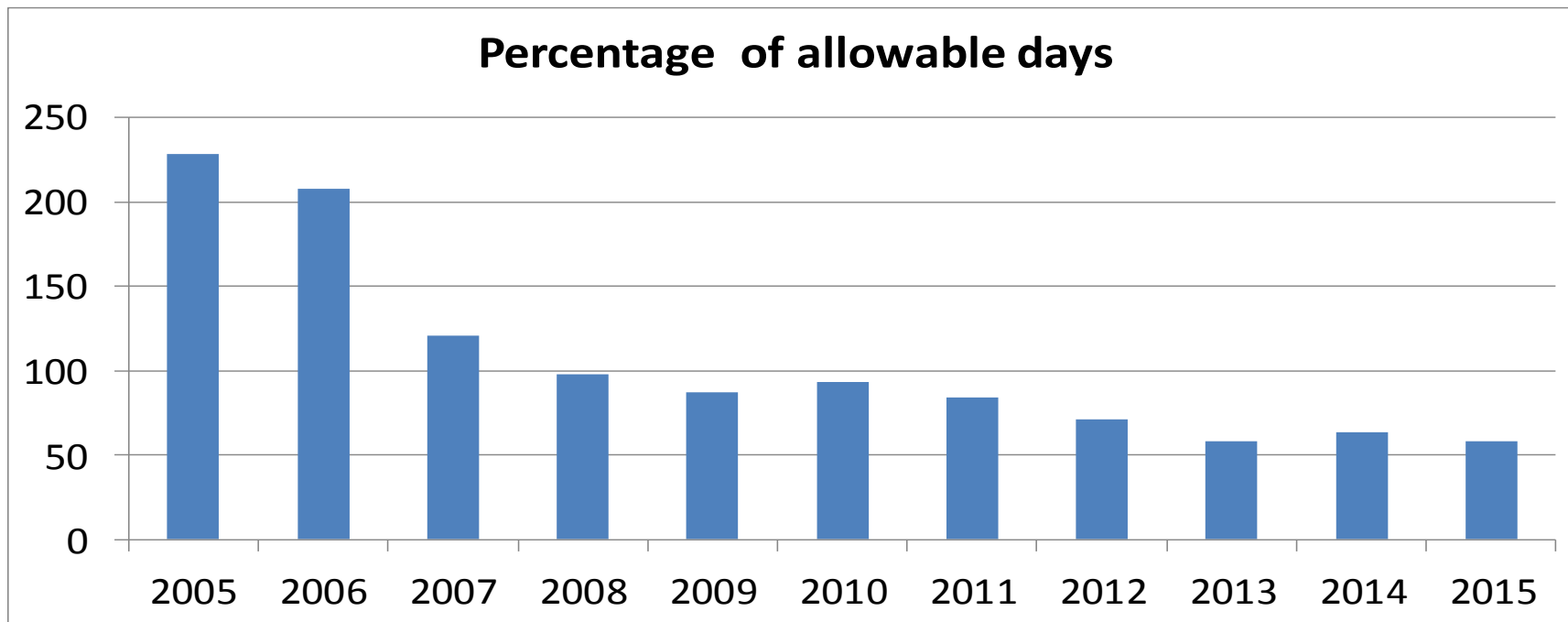
Inspections	97.28%	97%	75%
Self reporting	96.75%	99%	95%
Continuous monitoring (COM)	99.91%	99.9%	99%

** Tracks observations and not just inspections

Performance Metrics June 2005

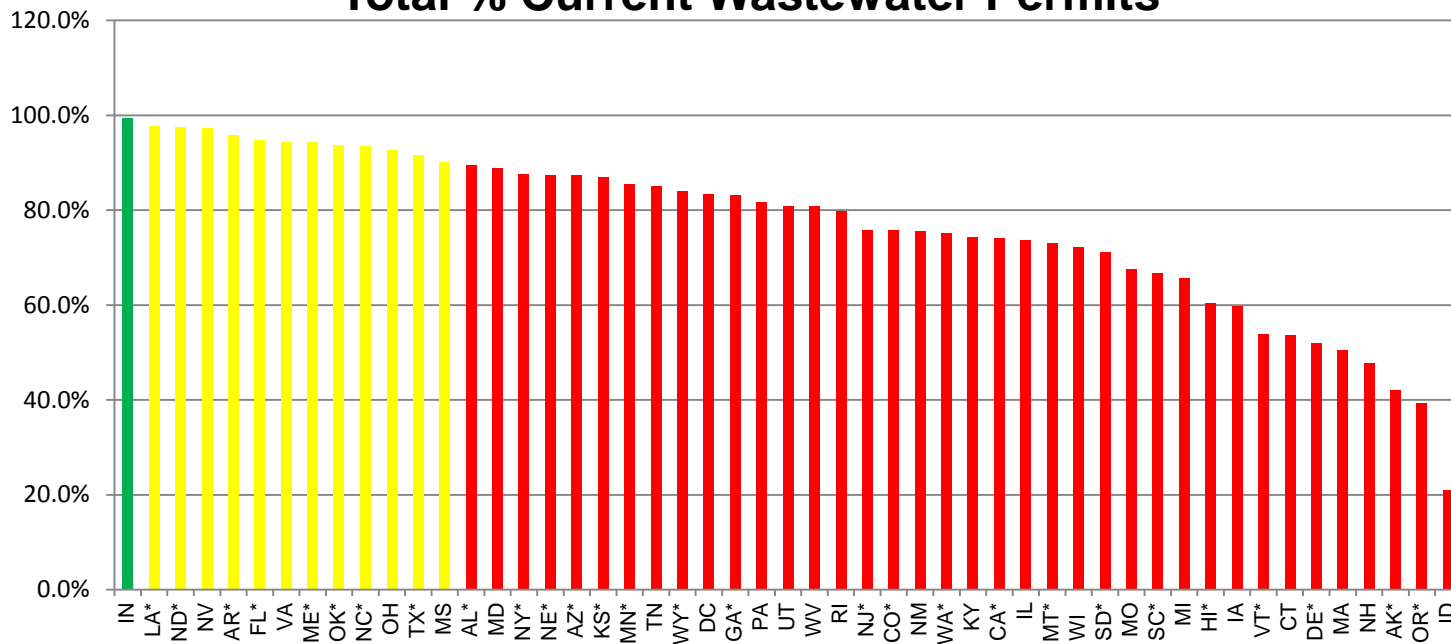
Quality of Hoosiers' Environment	Result		Target	Comments
% of Hoosiers in counties meeting air quality standards	61%	100%	80%	12 counties and 2,408,571 of 6,195,643 residents above standard
% of CSO Communities with approved programs to prevent the release of untreated sewage	4%	100%	20%	75% by 2007 is goal
Permitting Efficiency Total calendar days accumulated in issuing environmental permits, as determined by state statute*				
Land	100,013	66,565	86,864	
Air	511,000	207,000	385,000	
Water	301,000	48,000	200,000	
* Places emphasis on back logged permits				
Compliance Total percentage of compliance observations from regulated customers within acceptable compliance standards*				
Inspections	95.46%	97%	75%	
Self reporting	97.11%	99%	95%	
Continuous monitoring (COM)	99.19%	99.90%	98.95%	
* Tracks observations and not just inspections				
Organizational Transformation Budgetary agency dollars spent on key outside contracts for core agency functions.				
Dollars spent on outside services per year	\$6,179,367	\$0	\$3,447,017	

Permits – Percent of Statutory Days

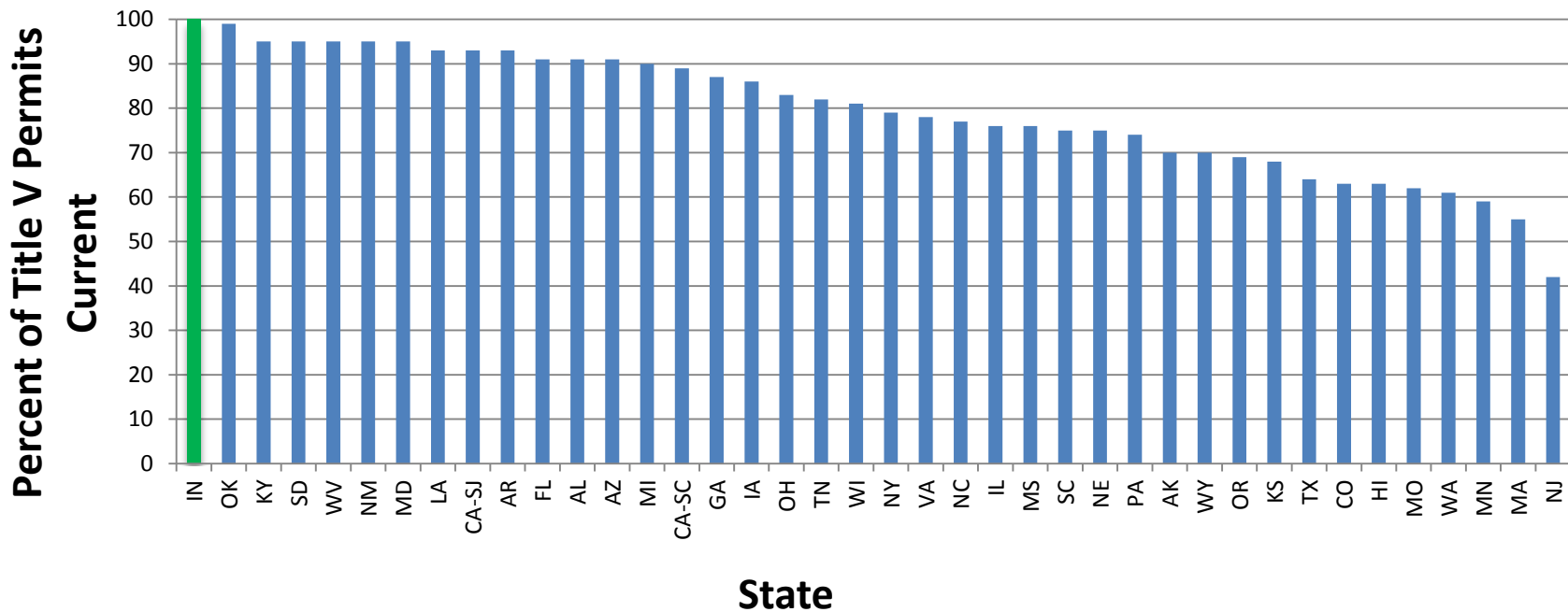


Indiana is Best in NPDES Permitting

Total % Current Wastewater Permits



Indiana is Best in Air Permitting



IDEM Inspects Facilities Regularly

- Full compliance evaluations of Part 70 sources once every two (2) years.
- Full compliance evaluations of all Federally Enforceable State Operating Permits once every five (5) years.
- Inspect all Treatment, Storage and Disposal Facilities every two (2) years.
- Compliance inspections at all Confined Animal Feeding Operations every five (5) years.
- Inspect each underground storage tank once every three (3) years.
- Inspect each major and minor NPDES Permitted facility every two (2) years.
- Inspect each general permitted facility every four (4) years.

WATCHDOG REPORT: New York and other states have fallen far behind schedule in scrutiny of Clean Water Act facilities

“In Indiana, where pollution review rules apparently are observed, **91 percent** of all facilities have been inspected in the last five years. In West Virginia, only 25 percent have been inspected.”

Press and Sun-Bulletin, July 3, 2014.



Compliance and Technical Assistance

- The Compliance and Technical Assistance Program (CTAP) provides assistance to help Indiana businesses understand and comply with environmental regulations. CTAP is:
 - **Non-Regulatory** – CTAP staff are not regulators and do not have regulatory authority. Therefore, businesses will not be penalized for reporting relevant environmental information to CTAP staff when requesting assistance.
 - **Free and Confidential** – While the CTAP serves as a liaison between the regulatory agencies and businesses, no details about the company working with CTAP is provided to regulators, as the information is protected under Section 507 of the Clean Air Act.
 - **Assistance** – CTAP provides assistance through an on-site visit or via phone and will provide a full compliance review or just target a single issue. It also develops training programs, brochures, and webinars to help businesses understand the state and federal environmental regulations that affect them.
 - **Multi-Media** – While most of the assistance provided is related to air regulations, staff also provides assistance related to water, land and Community Right to Know regulations.
- CTAP provides assistance to businesses that contact it directly, to businesses referred to it by regulatory inspectors or permit writers, and to businesses that CTAP identifies as impacted by new EPA or state regulations.

Contact us if you need assistance

Hotline: 800-988-7901

Email: CTAP@idem.in.gov

Website: <http://www.in.gov/idem/ctap/>

Voluntary Recognition Programs for Businesses

Goals: Promote pollution prevention & achieve measurable reduction of pollution in Indiana



- Eligibility contingent on:
 - Good environmental compliance standing
 - Partners Pledge
- Quarterly Networking meetings
- Innovation sharing
- 92 Members
- partners@idem.in.gov
- 1-800-988-7901



- Eligibility contingent on:
 - Established Environmental Management System and ISO Certification
 - Good environmental compliance standing
 - Commitment to continuous environmental improvement
- Regulatory Incentives
- 54 Members
- esp@idem.in.gov
- 1-800-988-7901

Voluntary Recognition Program for Communities

Goal: Promote pollution prevention & achieve measurable reduction of pollution in Indiana



Comprehensive
Local
Environmental
Action
Network

- Eligibility contingent on:
 - Good environmental compliance standing
 - Establishing Environmental Aspects & Initiatives
 - Commitment to continuous environmental improvement
- Participants choose four environmental goals for the four-year program term
- Benefits:
 - State-wide recognition
 - Networking
 - Innovation Sharing
- Currently 18 members

Contact CLEAN Community Challenge at: 1-800-988-7901 or CLEAN@idem.in.gov

Enforcement Statistics:

Media	2013	2014	2015
Air	81	117	112
Water	95	84	47
Hazardous Waste	31	34	23
Solid Waste	16	20	22
UST/LUST	12	30	15
CFO	12	23	22
TOTAL	247	308	241

IDEM's Office of Criminal Investigations

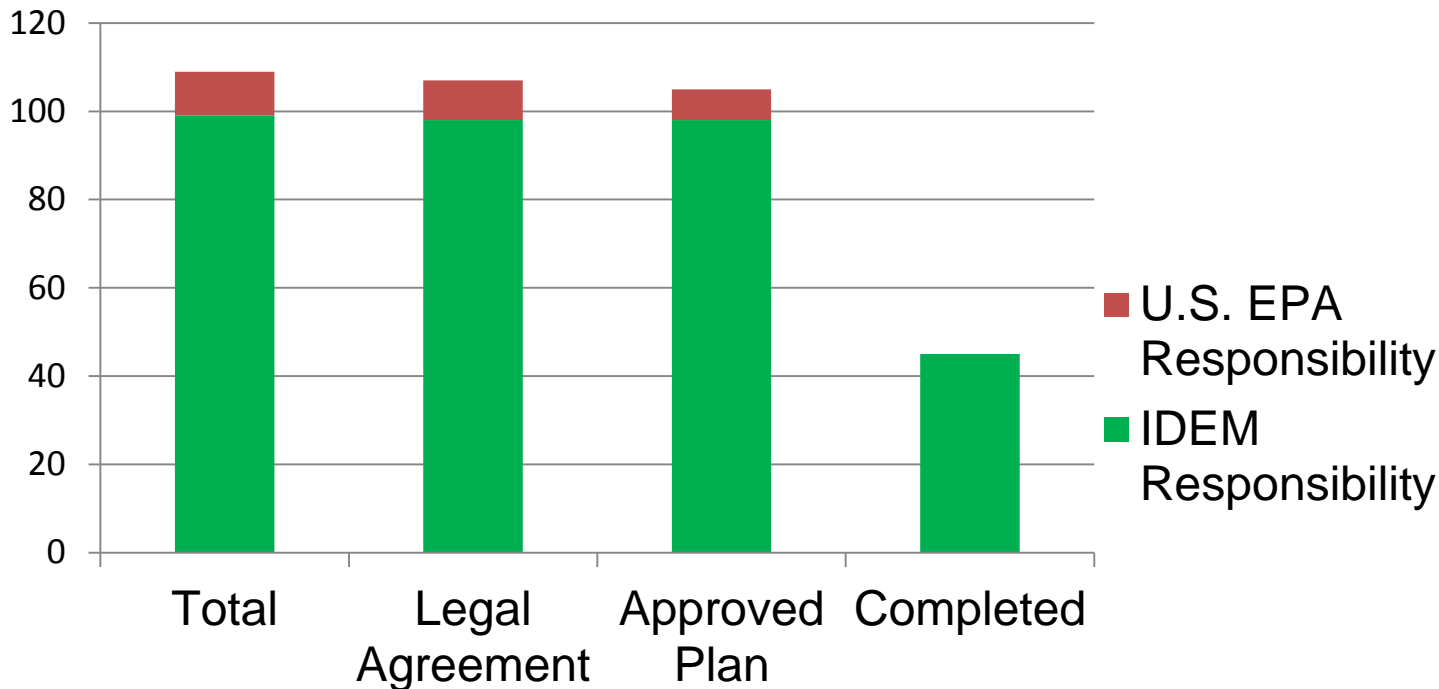
The primary duty of IDEM's investigative staff is to investigate allegations of criminal violations of Indiana's environmental protection laws, and to prepare a case for presentation to the Prosecuting Attorney who has jurisdiction over the alleged violations.

In some instances these investigative efforts are directed toward the presentation of a case at the federal level.

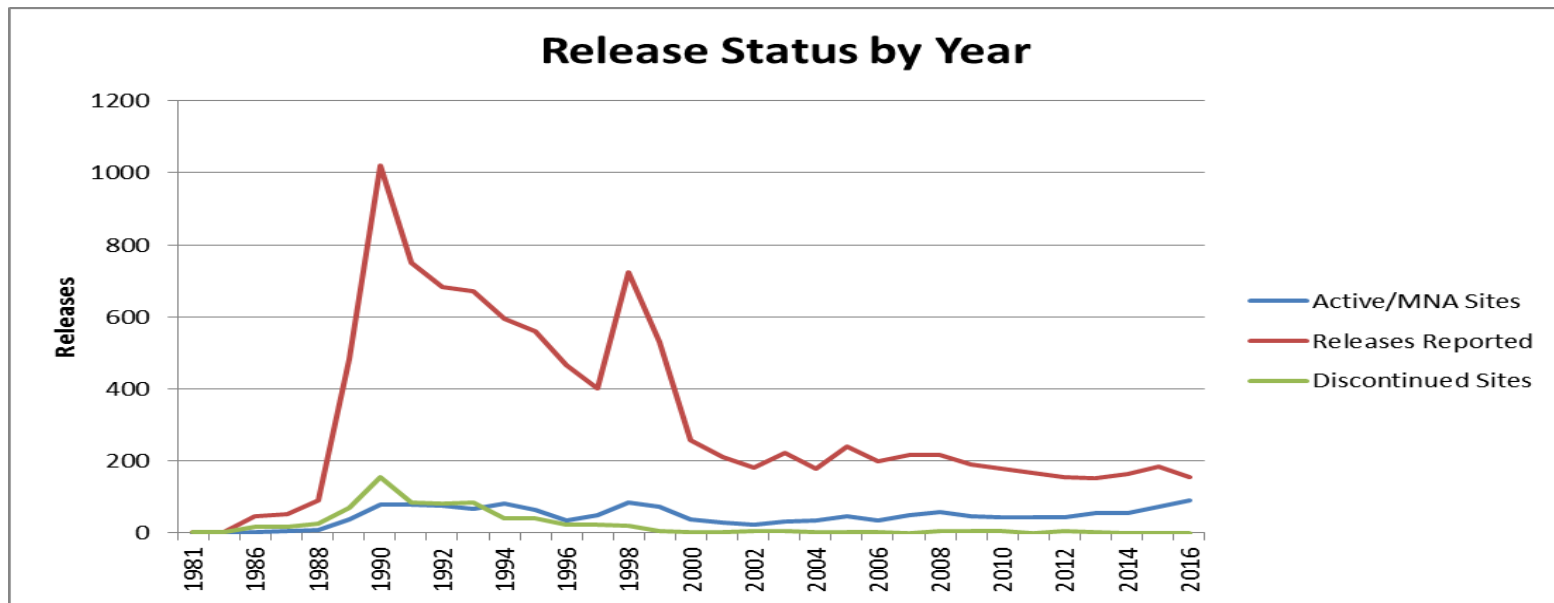


Water Quality

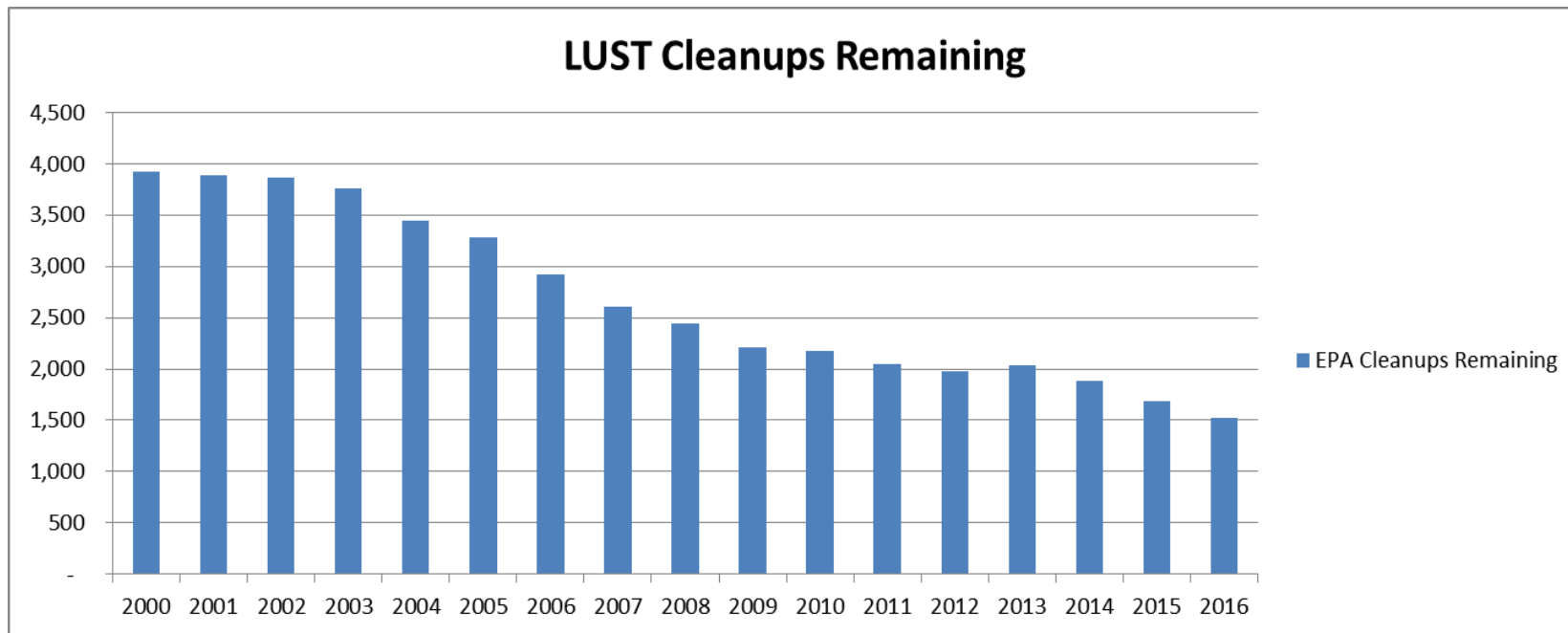
Indiana Combined Sewer Overflow Status



Petroleum Releases



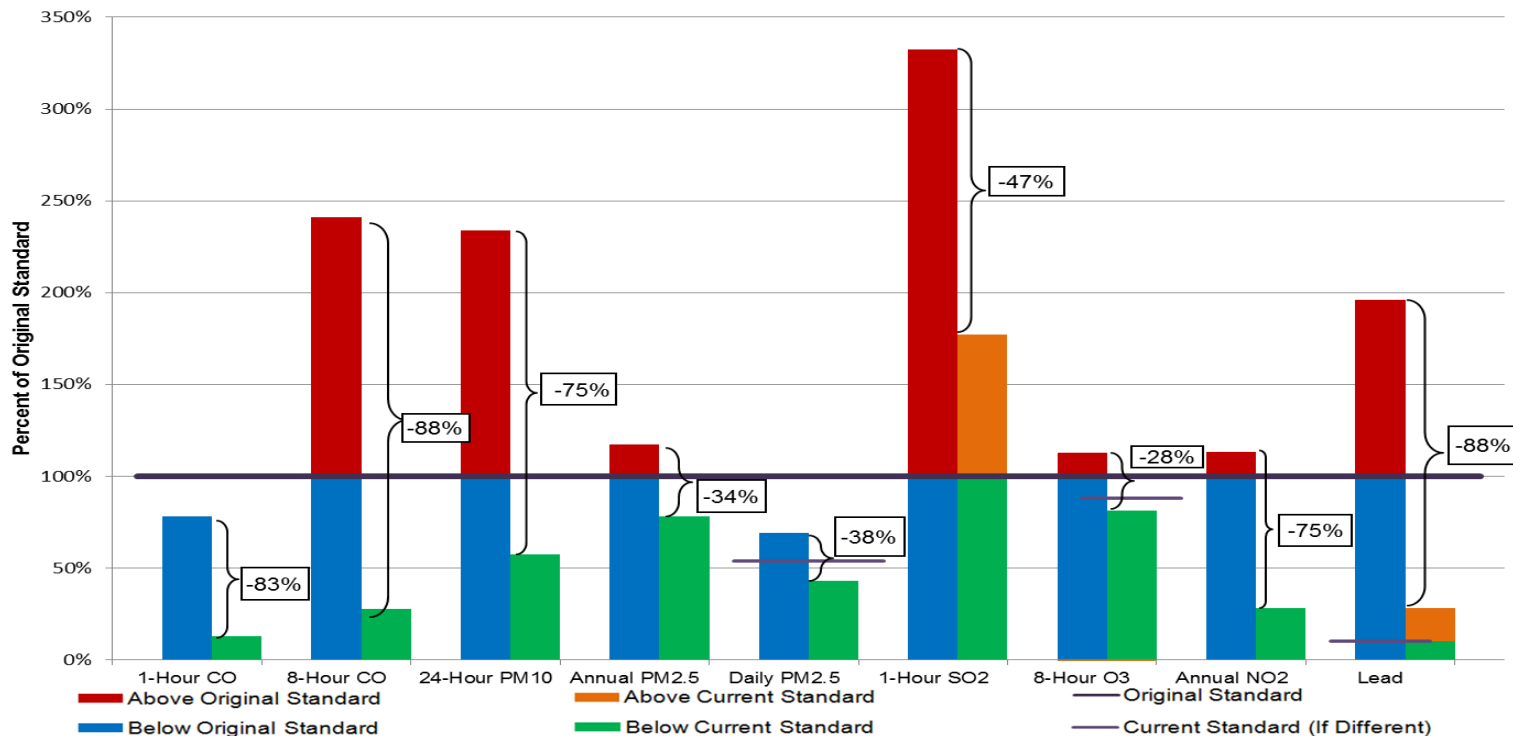
Petroleum Cleanups Remaining



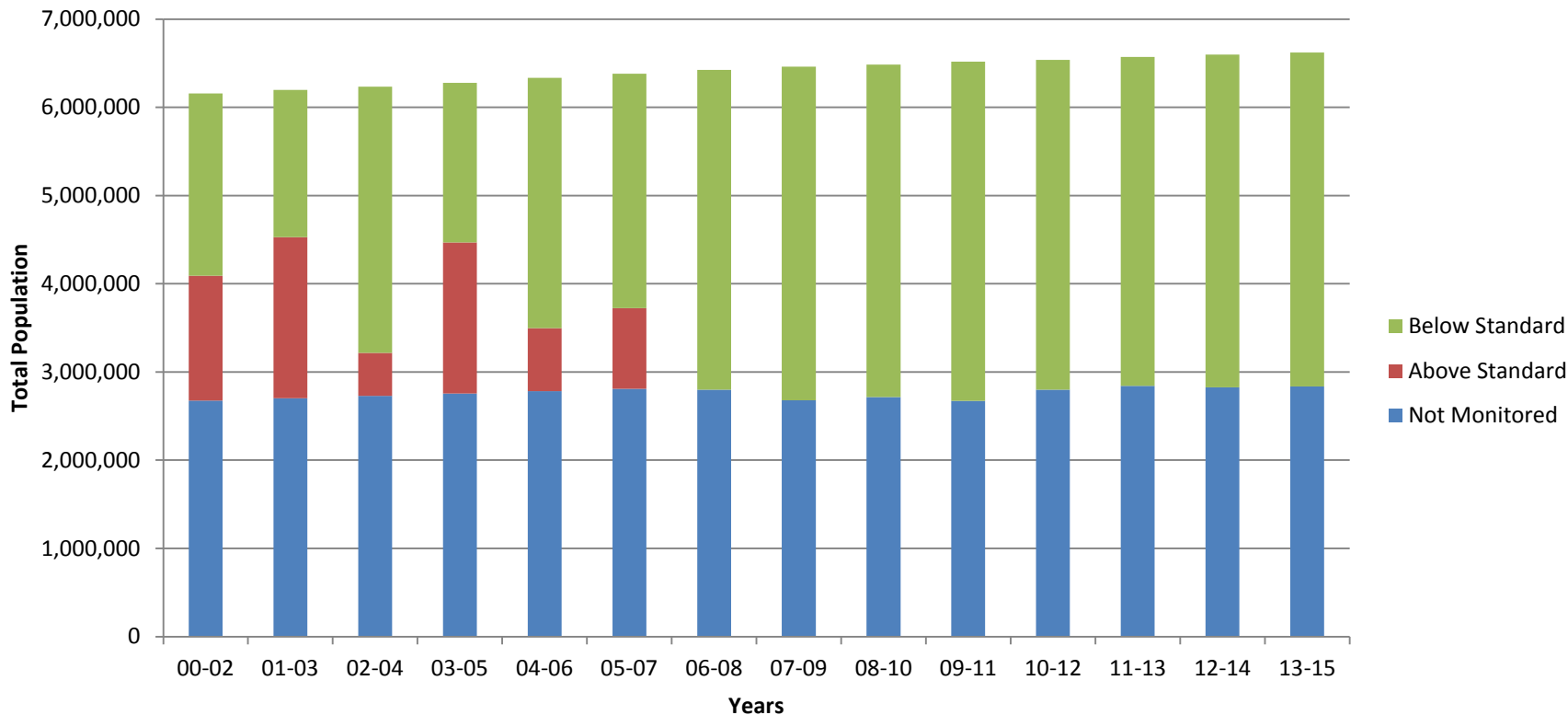
Indiana's Air Quality

At the end of 2009, all areas of the State of Indiana met every National Ambient Air Quality Standard in effect for the first time since the NAAQS were established in the 1970s.

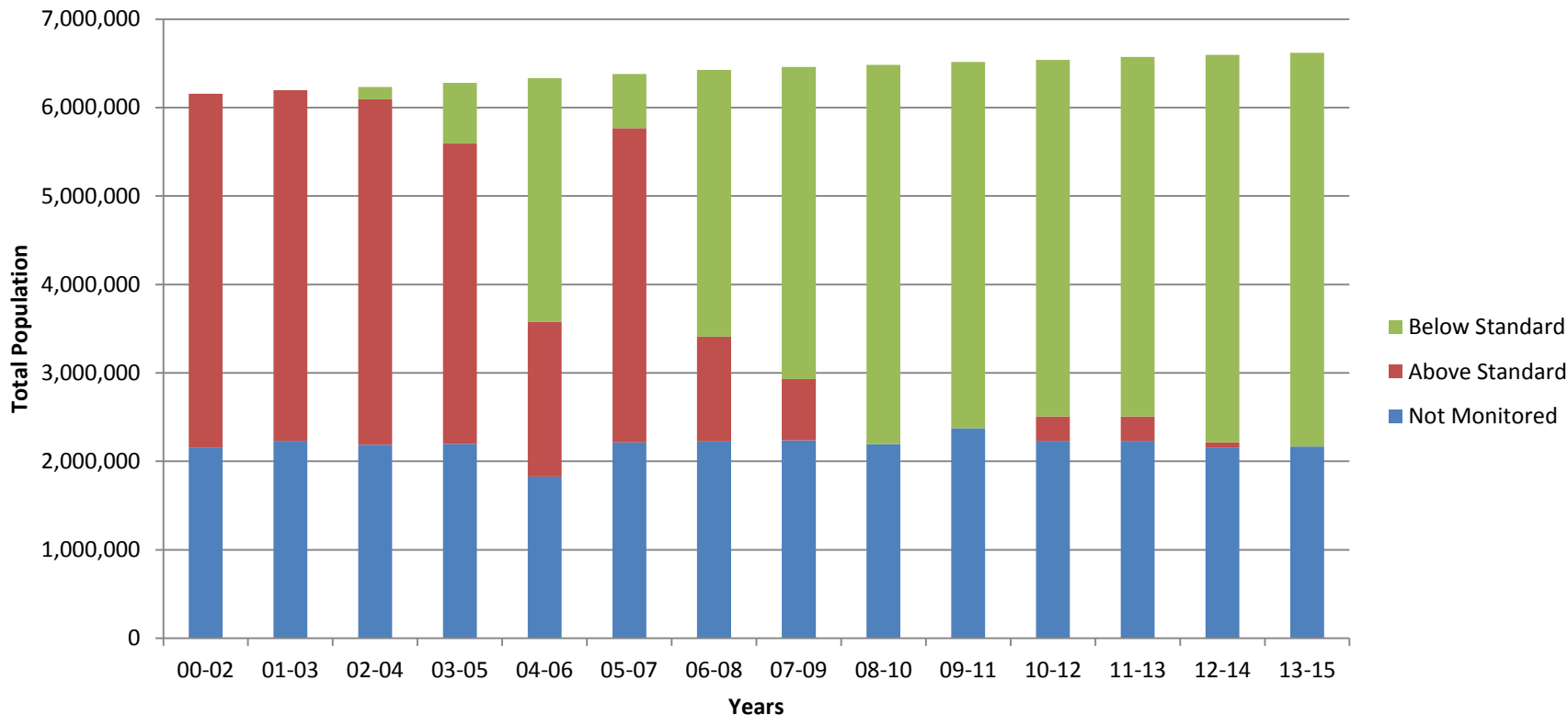
Percent Difference Between Highest Historical Monitored Concentration (Left Bar) and Highest 2015 Monitored Concentration (Right Bar) - Statewide



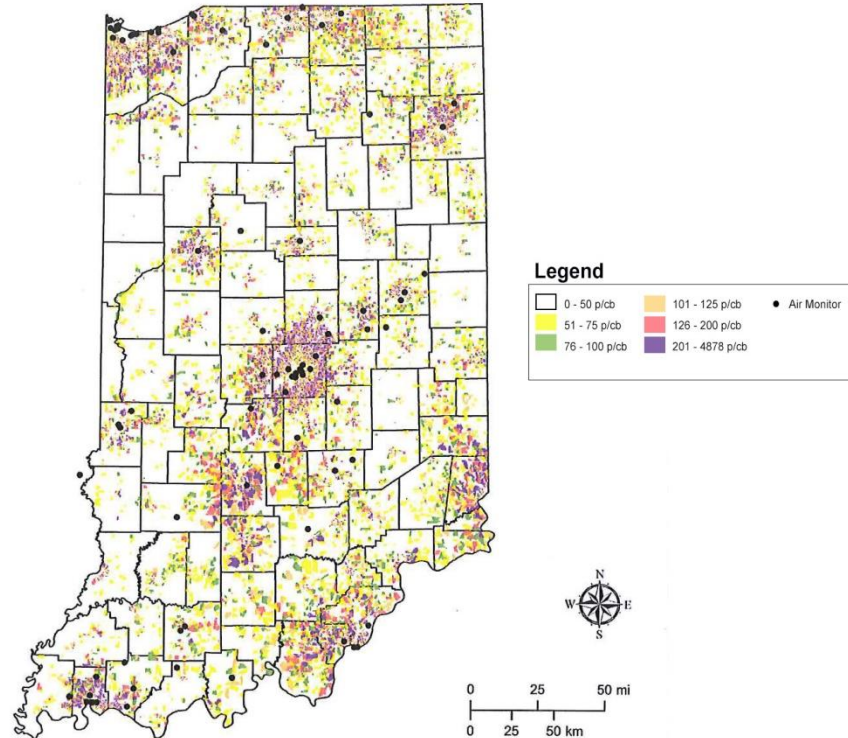
Air Quality Levels - 24 Hour PM-2.5 - Indiana



Air Quality Levels - 8 Hour Ozone - Indiana



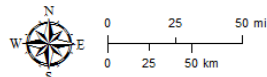
State Monitoring Network



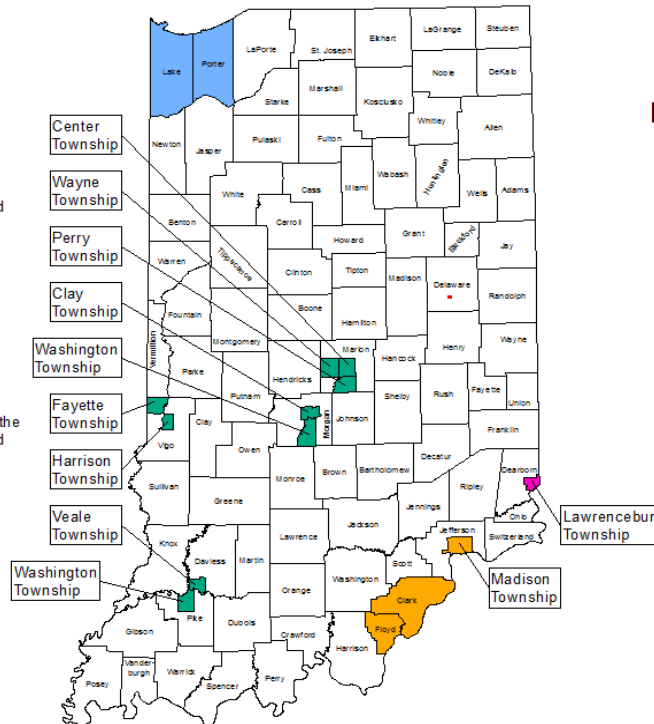
Current Air Quality

Legend

- Nonattainment for the 1997 Fine Particle Annual Standard
- Nonattainment for the 2008 Ozone 8-Hour Standard
- Nonattainment for the 2010 SO₂ 1-Hour Standard
- Nonattainment for the 2008 Lead Standard
- Nonattainment for the 2008 Ozone 8-Hour Standard and the 1997 Fine Particle Annual Standard

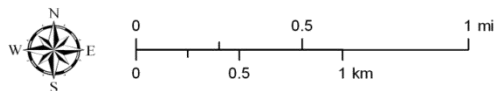
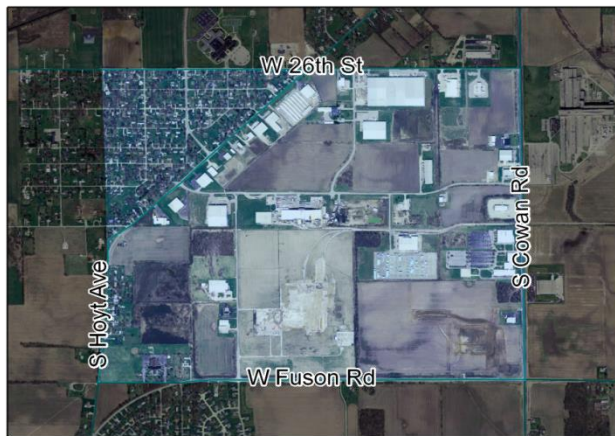


Mapped By: B. Callahan, OAQ
Date: 03/18/2015
Source: IDEM
Map Projection: UTM Zone 16 N
Map Datum: NAD83



Current Nonattainment Areas

Lead



Mapped By: C. Mitchell, OAQ

Date: 05/15/2014

Source: IDEM, Office of Air Quality

Map Projection: UTM Zone 16 N

Map Datum: NAD83

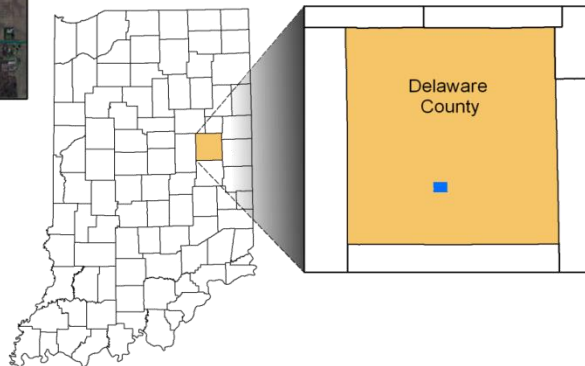
Note:

As printed in the Federal Register (Vol. 76, No. 225/Tuesday, November 22, 2011/Rules and Regulations) the lead nonattainment boundary for Indiana is defined as "A portion of the City of Muncie, Indiana bounded to the North by West 26th Street/Hines Road, to the east by Cowan Road, to the south by West Fuson Road, and to the west by a line running south from the eastern edge of Victory Temple's driveway to South Hoyt Avenue and then along South Hoyt Avenue."

Indiana Lead Nonattainment Boundary

Legend

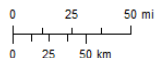
- Attainment/Unclassifiable
- Delaware County
- Enlargement of the Lead Nonattainment Area
- Nonattainment for the 2008 Lead Standard



Ozone

Legend

- Ozone Design Value Less Than or Equal to 0.070 ppm
- Nonattainment for the 2008 8-Hour Ozone Standard



Notes:

- Posted Data Are in Units of Parts per Million (ppm)
- Posted Data Represent Ozone 8-Hour Average Design Values, 2013 - 2015

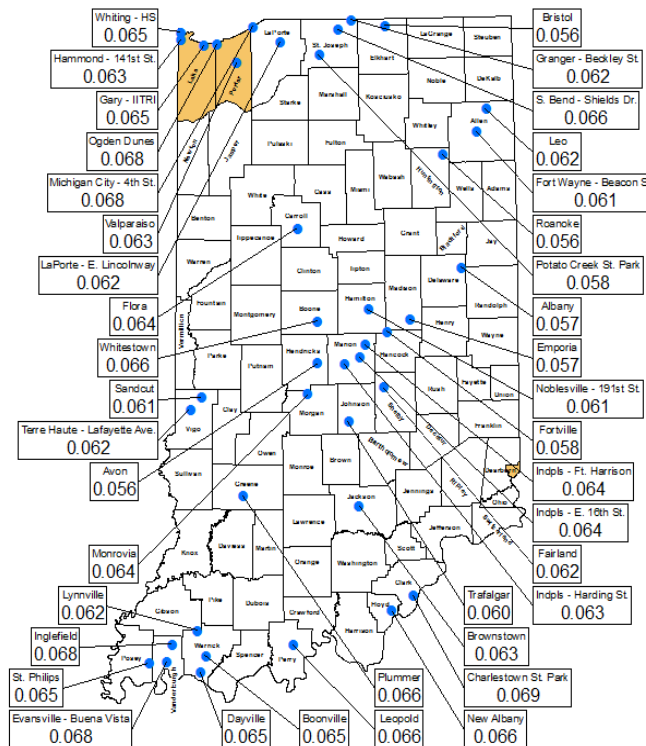
Date: 03/30/2016

Mapped By: C. Mitchell, OAQ

Sources: Office of Air Quality

Map Projection: UTM Zone 16 N

Map Datum: NAD83



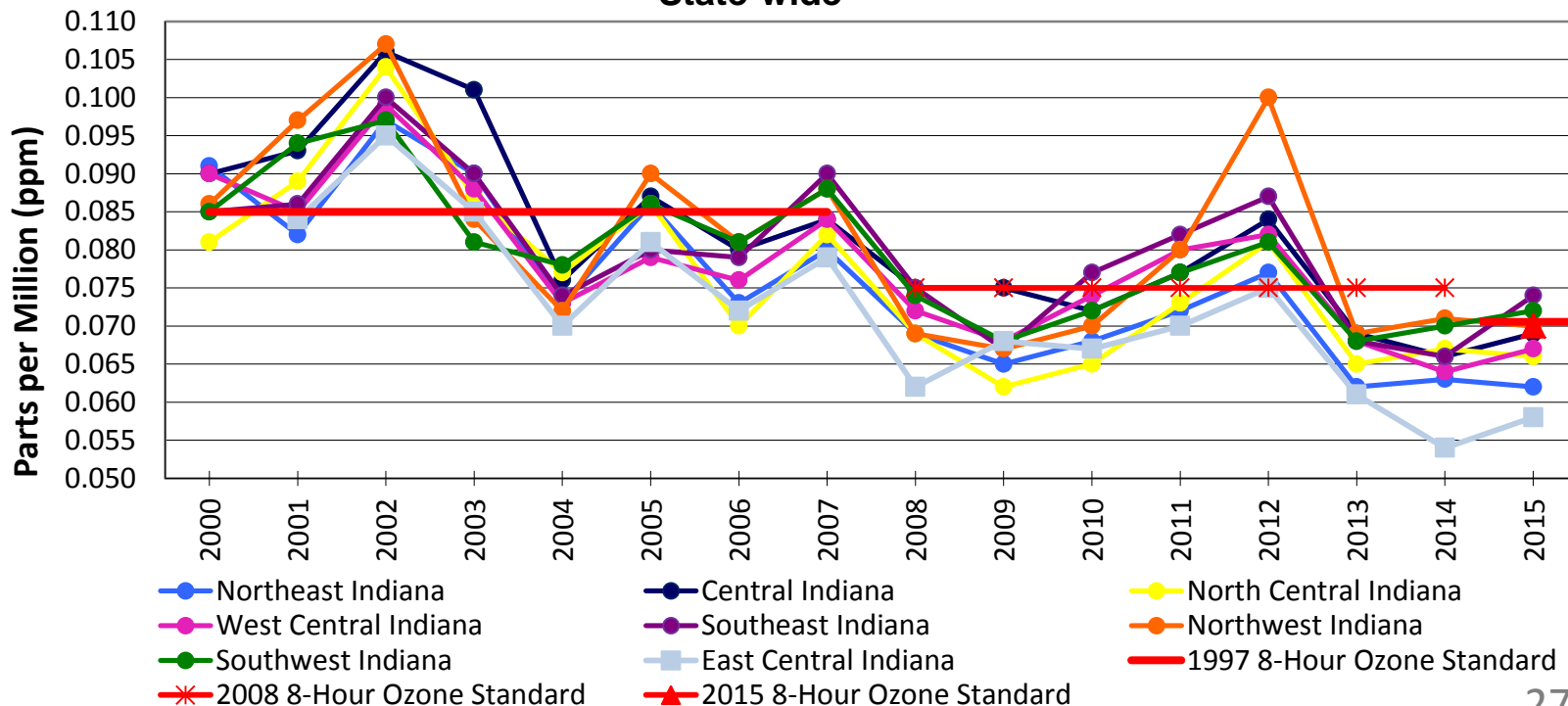
**Ozone 8-Hour
Design Values
(3-Year Average
4th High Daily
Maximum)**

**Based on
2013 - 2015
Monitoring Data**

*Standard set at
0.070 ppm*

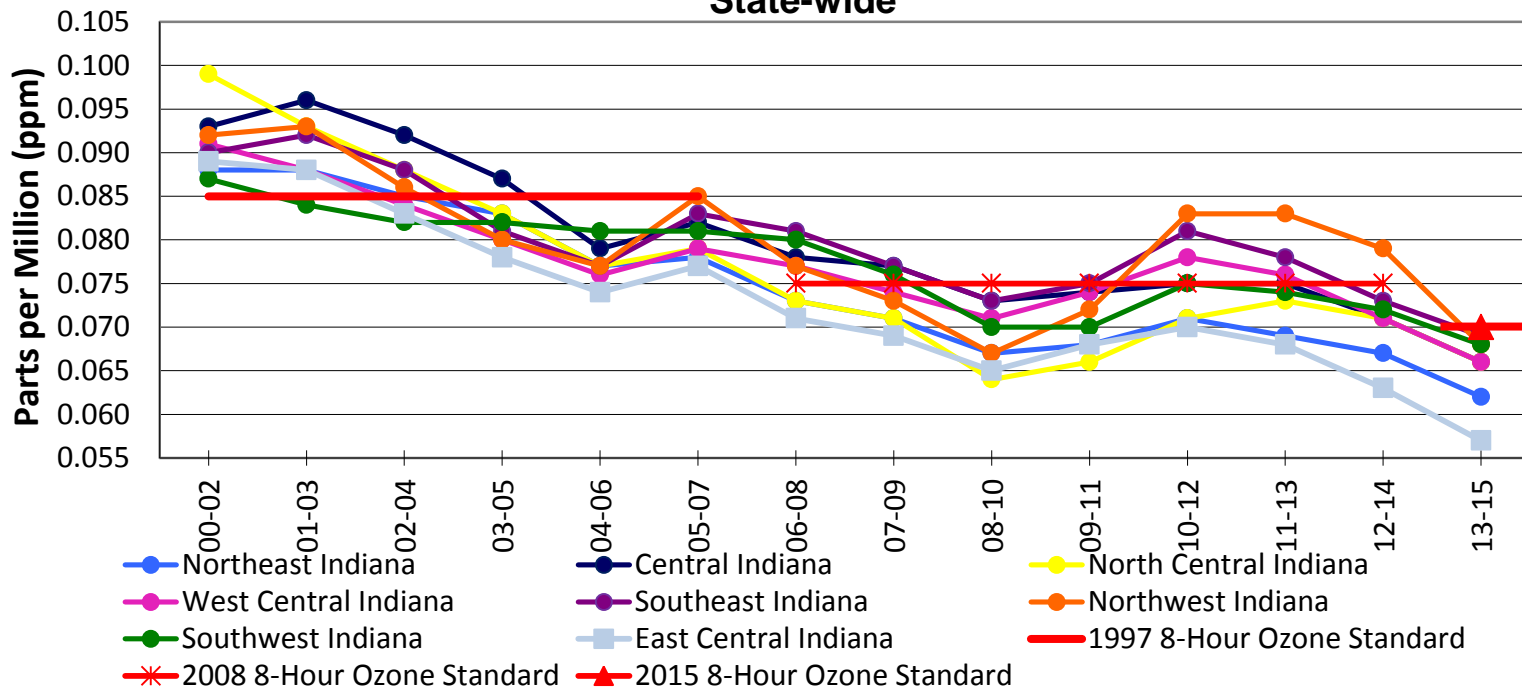
Ozone

Ozone 4th - High Values Monitor Trend Chart State-wide



Ozone

Ozone Design Values Highest Monitor Trend Chart State-wide



Legend

- PM_{2.5} Design Value Less Than or Equal to 35 µg/m³
- Indiana County Borders



0 25 50 mi
0 25 50 km

Notes:

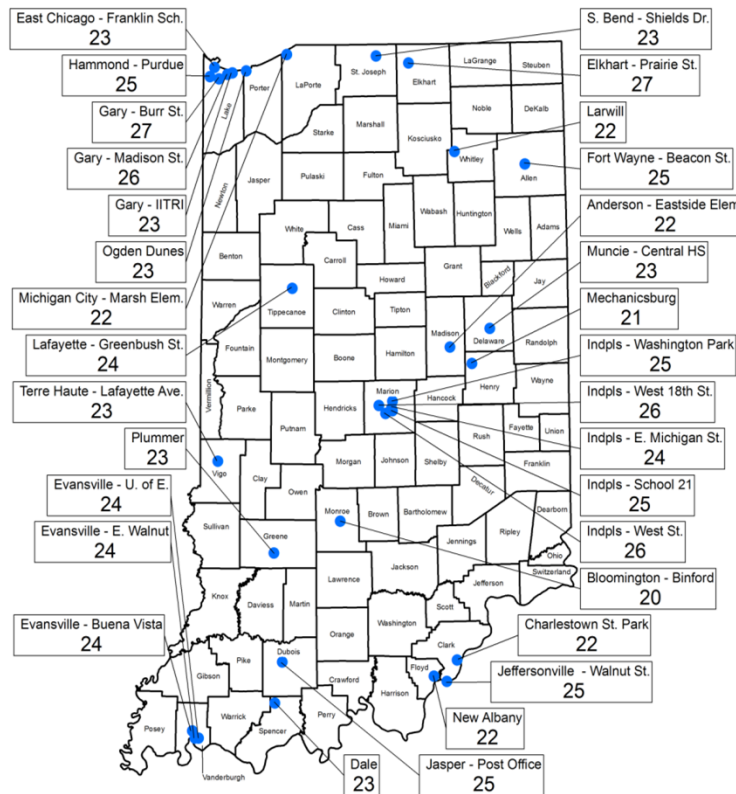
Posted Data Are in Units of Micrograms Per Cubic Meter (µg/m³)

Mapped By: C. Mitchell, OAQ
Date: 03/04/2016

Source: IDEM, Air Monitoring

Map Projection: UTM Zone 16 N

Map Datum: NAD83

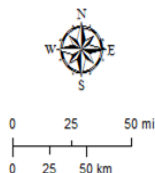


PM_{2.5} 24-Hour Design Values 2013 - 2015

Standard set at 35.0 µg/m³

Legend

● PM_{2.5} Design Value
Less Than or Equal
to 12.0 $\mu\text{g}/\text{m}^3$



Notes:

Posted Data Are in Units
of Micrograms Per Cubic
Meter ($\mu\text{g}/\text{m}^3$)

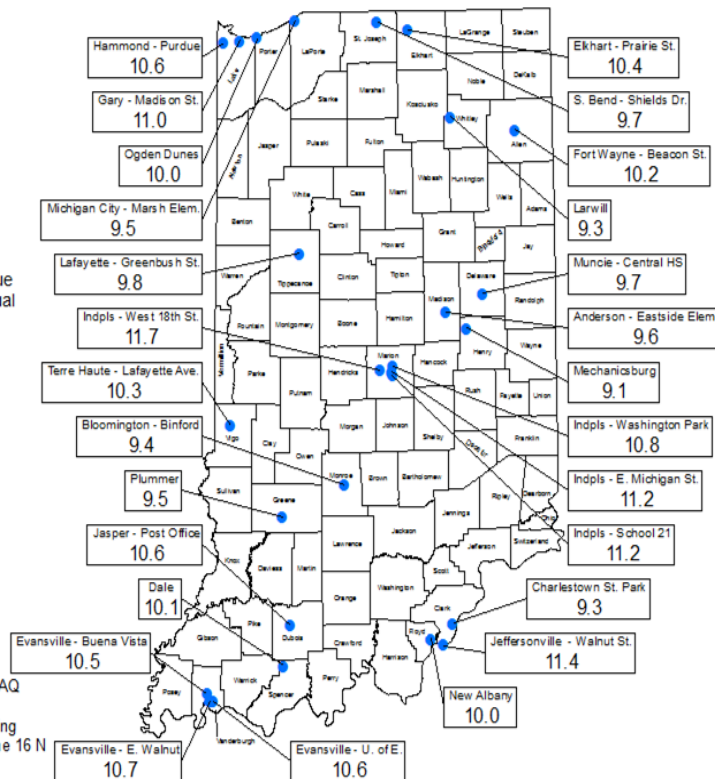
Mapped By: C. Mitchell, OAQ

Date: 03/30/2016

Source: IDEM, Air Monitoring

Map Projection: UTM Zone 16 N

Map Datum: NAD83

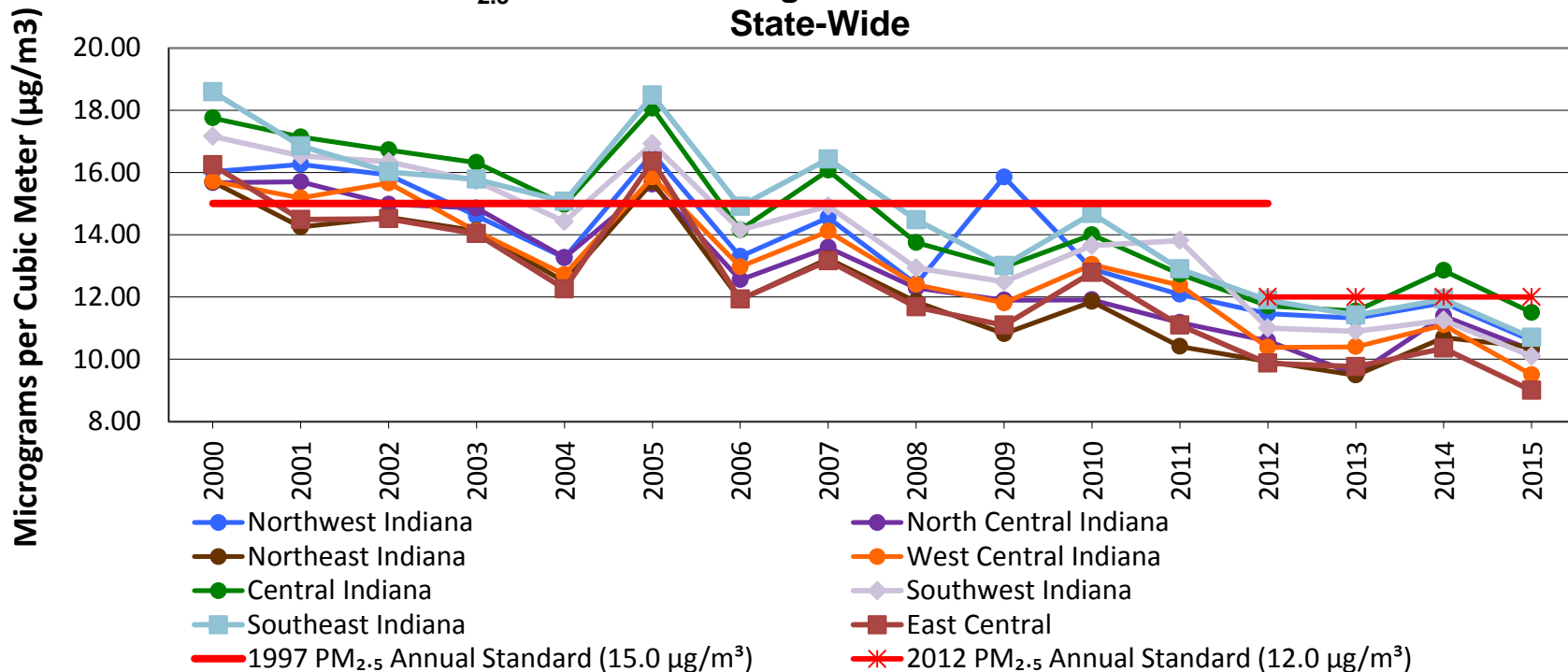


**PM_{2.5} Annual
Design Values
2013 - 2015**

*Standard at
12.0 $\mu\text{g}/\text{m}^3$*

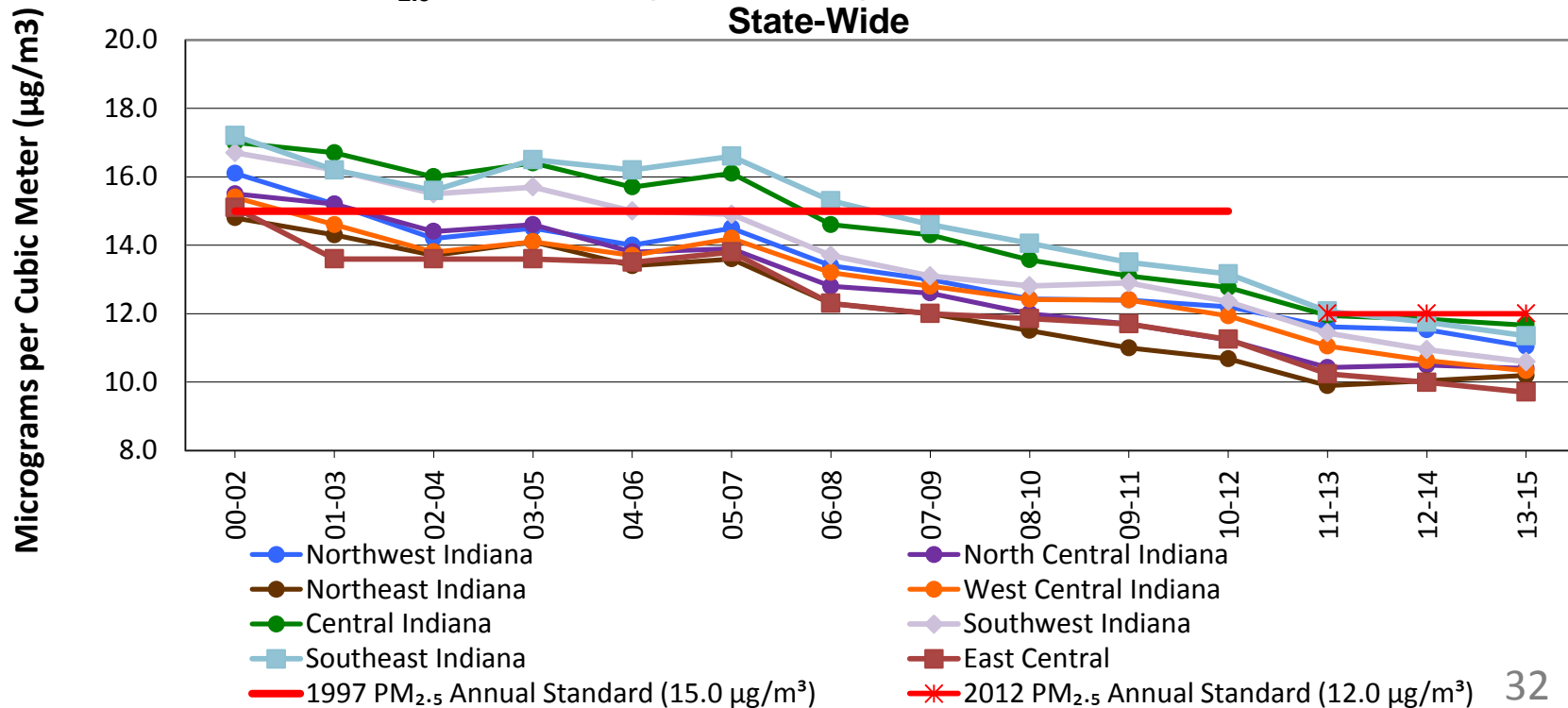
Particulate Matter

PM_{2.5} Annual Mean Highest Monitor Trend Chart State-Wide



Particulate Matter

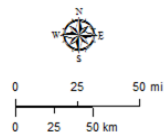
PM_{2.5} Annual Design Values Highest Monitor Trend Chart State-Wide



Sulfur Dioxide

Legend

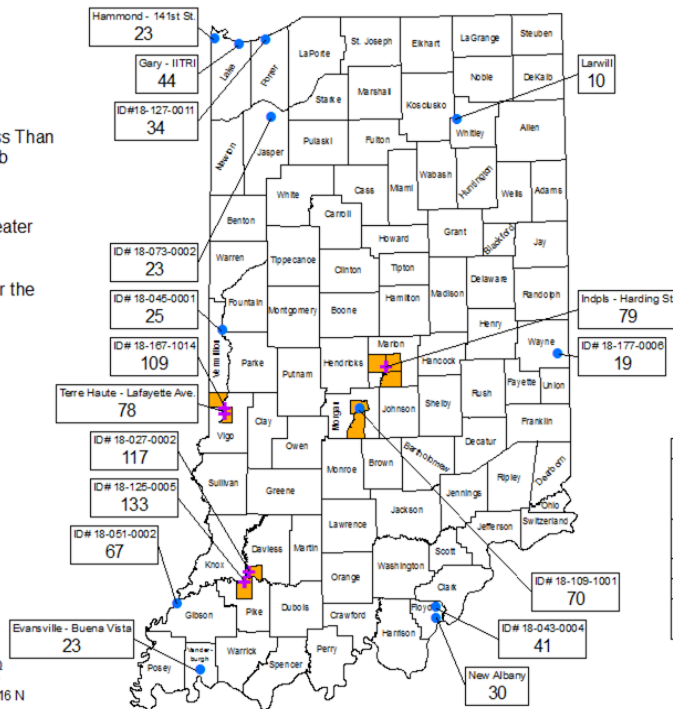
- SO₂ Monitor With Design Value Less Than or Equal to 75 ppb
- + SO₂ Monitor With Design Value Greater Than 75 ppb
- Nonattainment for the 2010 1-Hour SO₂ Standard



Notes:

- Posted Data Represent 1-Hour Average Design Values, 2013 - 2015
- Posted Data are in Units of Parts Per Billion (ppb)

Date: 03/30/2016
Mapped by: C. Mitchell, OAQ
Source: Office of Air Quality
Map Projection: UTM Zone 16 N
Map Datum: NAD83



SO₂ 1-Hour
Design Values
2013 - 2015

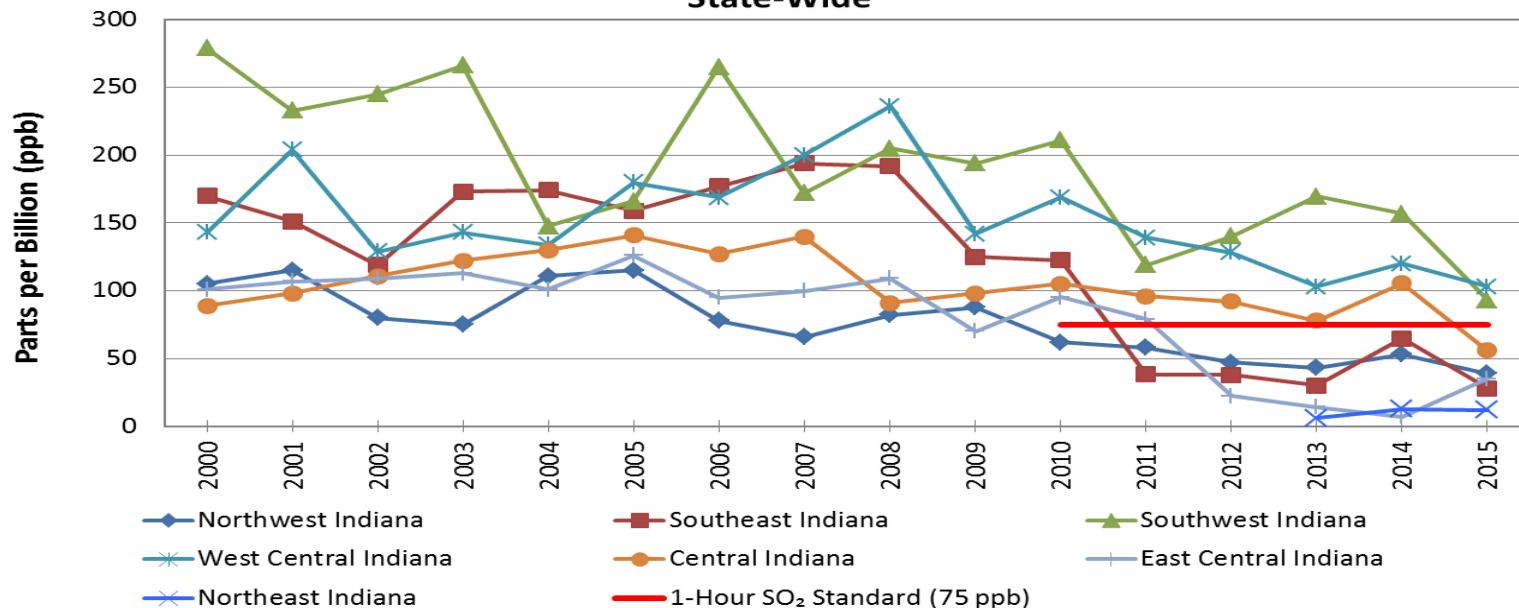
and
SO₂
Nonattainment
Areas

Standard Set at
75 ppb

County	Nonattainment Area
Marion	Center Township
	Perry Township
	Wayne Township
Morgan	Clay Township
	Washington Township
Daviess	Veale Township
Pike	Washington Township
Vigo	Fayette Township
	Harrison Township

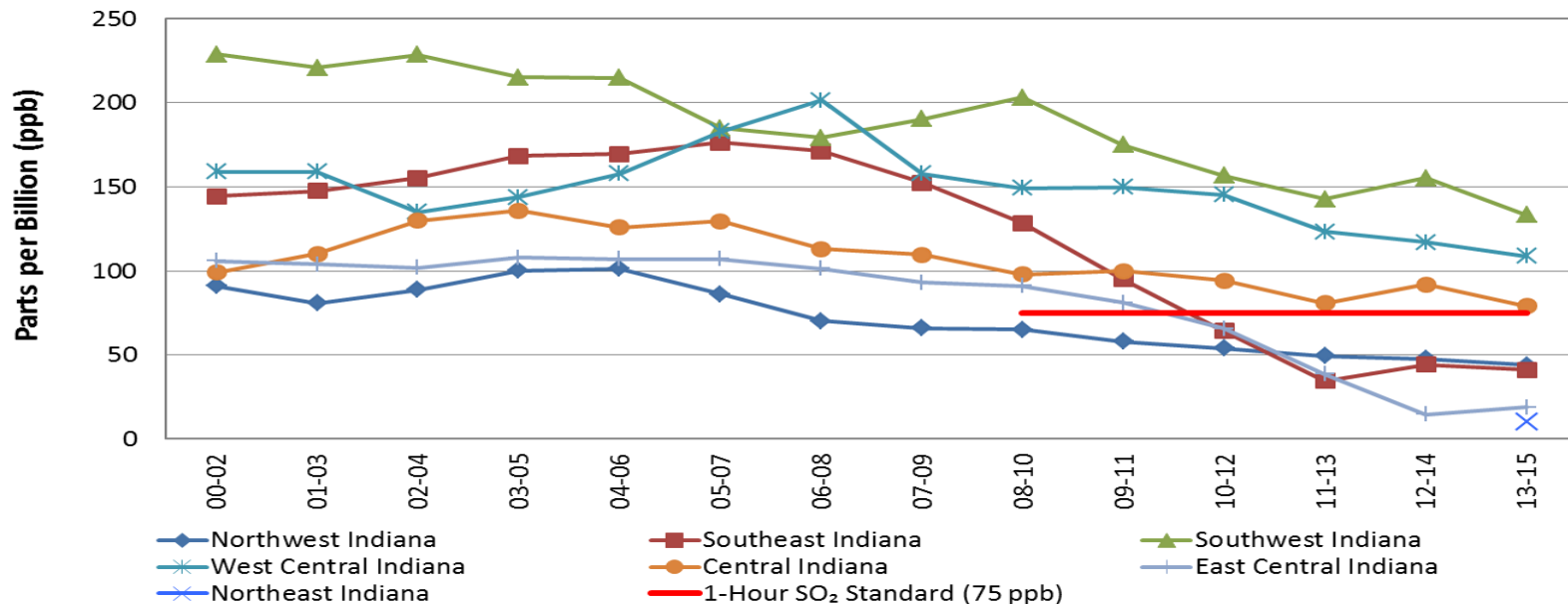
Sulfur Dioxide

SO₂ 4th - High Value Highest Monitor Trend Chart
State-Wide



Sulfur Dioxide

SO₂ 1-Hour Design Value Highest Monitor Trend Chart
State-Wide



Anticipated NAAQS Implementation Milestones

(as of August 2016)

Pollutant	Final NAAQS Date	Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
Ozone (2008)	Mar 2008	July 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
Ozone (2015)	Oct 2015	Dec 2017	Oct 2018	Dec 2020-2021	2020-2037
Lead (2008)	Oct 2008	Dec 2010-2011	Oct 2011	Jun 2012-2013	Dec 2015-2016
Primary NO₂ (2010)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
Primary SO₂ (2010)	Jun 2010	Oct 2013, Sept 2016 (+2 Rounds)	Jun 2013	Apr 2015, March 2018 (2019, 2022)	Oct 2018, Sept 2021 (2023, 2026)
PM_{2.5} (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
PM_{2.5} (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Mod)	Dec 2021 (Mod) Dec 2025 (Ser)

2016 Legislation

- Mercury Switch Program
 - Extends the life of the program.
- Antidegradation
 - Clarifies when antidegradation demonstrations are required.
- E-Waste
 - Changes the reporting deadline from fiscal to calendar year.
- Variance
 - Allows the commissioner to revoke a variance.

2016 Legislation

- Recycling Reporting Due Date
 - Changes IDEM's reporting deadline in order to align with the recyclers' reporting deadline.
- Legal Action
 - Removes citations to the administrative code that are no longer valid.
- Land Application
 - Updates definitions to reflect the replacement of the term wastewater with septage.

2016 Legislation

- Excess Liability Trust Fund
 - Clarifies eligibility requirements for fund access.
- Legitimate Use of Waste
 - Allows for the legitimate use of solid and hazardous waste.

The Clean Power Plan

- On August 3, 2015, U.S. EPA released the final rule, which requires each state to meet future goals established by U.S. EPA for CO₂ emissions from EGUs.
- These goals phase in from 2022 to 2030.
- September 6, 2016 – Initial State Plans due to U.S. EPA.
- September 6, 2018 – Final State Plans due to U.S. EPA.

Indiana's Requirements Under the Clean Power Plan

- Indiana's 2012 baseline CO₂ emissions are 2021 lbs. CO₂/MWh.
- Under the CPP, Indiana EGUs will be required to reduce CO₂ emissions to 1242 lbs. CO₂/MWh.
- Indiana faces a reduction of 38.5% compared with:
 - Pennsylvania: 4% reduction.
 - West Virginia: 17% reduction.
 - Ohio: 10% reduction.

Clean Power Plan Litigation

- 25 states (including Indiana) challenged the validity of the CPP and sought a stay while litigation is pending.
- The DC Circuit Court of Appeals denied the stay.
- On February 9, 2016, the U.S. Supreme Court granted the stay 5-4 (one of Justice Scalia's last votes).

Clean Power Plan Oral Argument

- Oral argument was heard by the 10-member D.C. Circuit *en banc* on September 27, 2016, for over six hours.
- Judge Merrick Garland recused himself.
- States argued the CPP is an unconstitutional power grab by EPA to reorder the country's electric mix.
- EPA argued the CPP addresses climate change which it said was “the environmental challenge of our time.”

CPP: Where do we stand?

- None of the CPP deadlines are currently in effect.
- The State of Indiana is investing no additional resources into the CPP until the litigation is resolved.
- We continue to monitor the situation so that we are prepared to act when necessary.

Coal Combustion Residuals: The Federal Rule

- CCR are fly ash, bottom ash, boiler slag and flue gas desulfurization materials generated from burning coal to generate electricity by electric utilities and independent power producers.
- The federal CCR Rule became effective on October 19, 2015.
- It establishes technical requirements for CCR landfills and surface impoundments under RCRA.

CCR Federal Rule Requirements

- The rule contains compliance deadlines.
- The rule is self-implementing and is designed to be enforced through citizen's suits.
- It allows states to amend their own Solid Waste Management Plans in order to grant and enforce alternative compliance schedules for federal deadlines.

CCR: State Rules

- IDEM was approached by members of the regulated community who preferred state regulation.
 - protection from citizen's suits.
 - authority to grant extensions for compliance with some federal deadlines.
- Indiana already regulates CCR landfills.
- A new rule would incorporate the federal requirements and extend Indiana's regulatory authority to surface impoundments.

CCR: the State Rules

- The Environmental Rules Board (ERB) passed an emergency rule in February 2016 that incorporated the relevant federal regulations into Indiana's rules to regulate CCR impoundments.
- Final Rule incorporating the concepts of the emergency rule was adopted by the ERB in August.
- Final Rule goes into effect in December 2016.
- The Emergency Rule has been extended and will be extended again at the November ERB meeting.

CCR: State Solid Waste Plan

- IDEM is drafting amendments to Indiana's Solid Waste Plan to address CCR and criteria for extending compliance deadlines.
- The amendments will conform with EPA disposal requirements and incorporate surface impoundment regulations.
- The Public comment period ended on June 30, 2016.

CCR: Where are we?

- EPA: expressed concern that Indiana's existing statutes do not provide authority to fully regulate CCR activities.
- IDEM is working with stakeholders on state legislative changes to resolve the issue.
- U.S. Congress is also moving forward with CCR-related legislation to change enforcement from citizen's suits to state programs.

Applicability of RCRA Corrective Action Laws to Current Owners of Hazardous Waste Disposal Sites

IDEM has determined that its authority to order corrective actions under RCRA, I.C. § 13-22-13 *et al.*, and related federal and state rules and regulations, **does not** extend to subsequent owners of hazardous waste facilities if the subsequent owner did not operate such a facility on the site, did not seek or receive a permit to do so, and was not required to seek or receive such a permit.

www.in.gov/idem/files/npd-waste-0067.pdf

Technical Review Panel

- Pilot Project for Resolving Technical Disputes.
- Applies to State Cleanup and VRP sites.
- Panel Composed of Subject Matter Experts within IDEM but outside of the Remediation Program.
- Available once internal review concurs there is an impasse and the consultant requests review by the Panel.

Lead in Drinking Water

- In January and February, IDEM requested an update from all 789 community public water systems regarding the locations of their lead service lines. The responses are available on IDEM's virtual file cabinet.
- During the most recent legislative session, the Indiana General Assembly passed SEA 93 which provides that schools are to be supplied safe drinking water from their public water system.
- When systems have a lead exceedance, a certified copy of the lead consumer public notification sent to ratepayers must be submitted to IDEM in accordance with the federal rule, and the notification will be posted to IDEM's virtual file cabinet.
- IDEM has taken steps to improve the administration of the drinking water program by developing and implementing "lab-to-state" wherein certified laboratories submit their drinking water sampling results electronically.

Lead: Updates

- Working with Indiana Finance Authority (State Revolving Funds Program) to potentially create a lead removal funding program.
- Requiring systems to view and update their Lead and Copper Sampling Plan to ensure systems are monitoring from locations that are at high risk of lead or copper contamination.

Lead: Recommendations

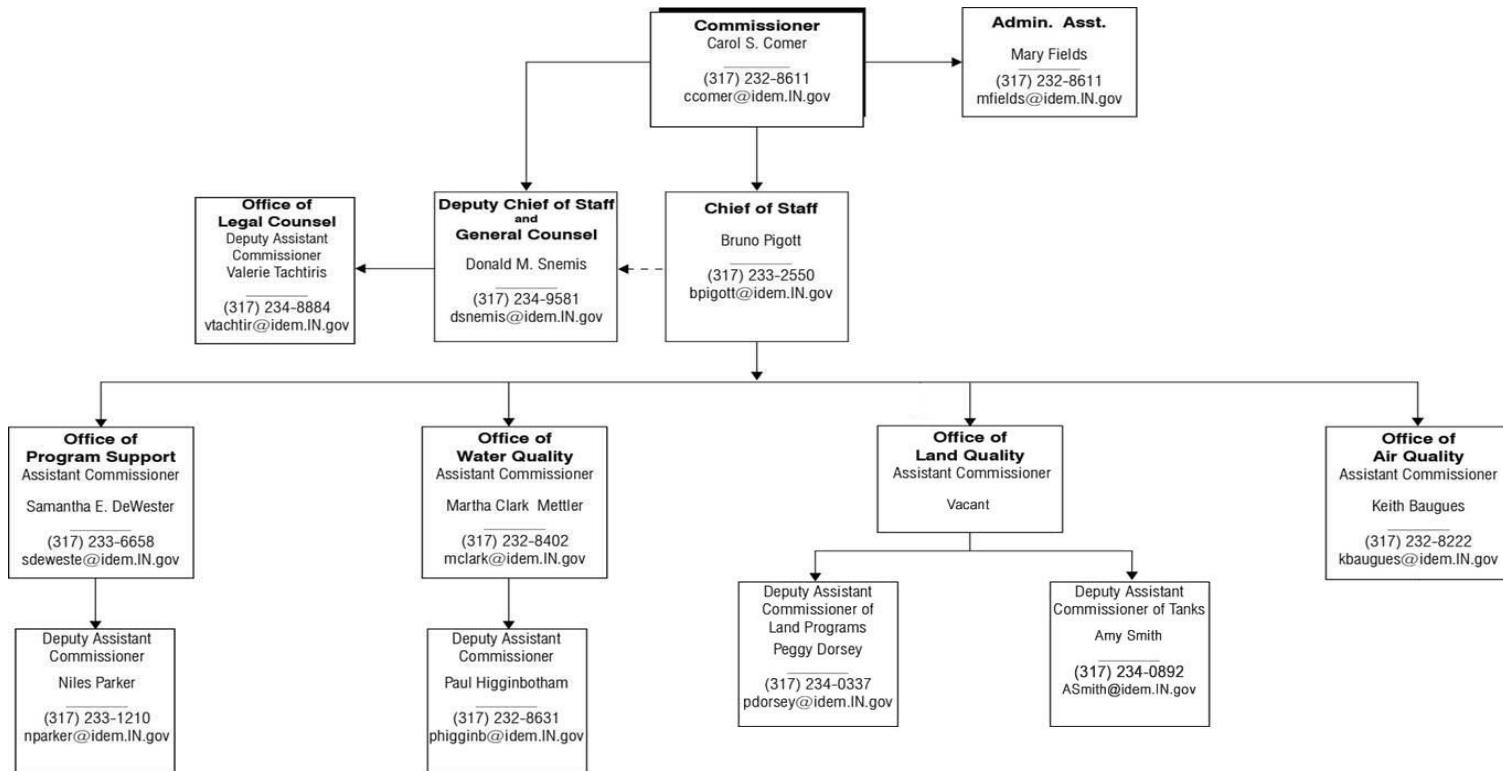
- IDEM recommends delivering Consumer notice by the close of the next business day **if result exceeds Action Level.**
- IDEM recommends delivering all consumer notices within 10 days.
- IDEM recommends providing Public Education to all consumers within 30 days.

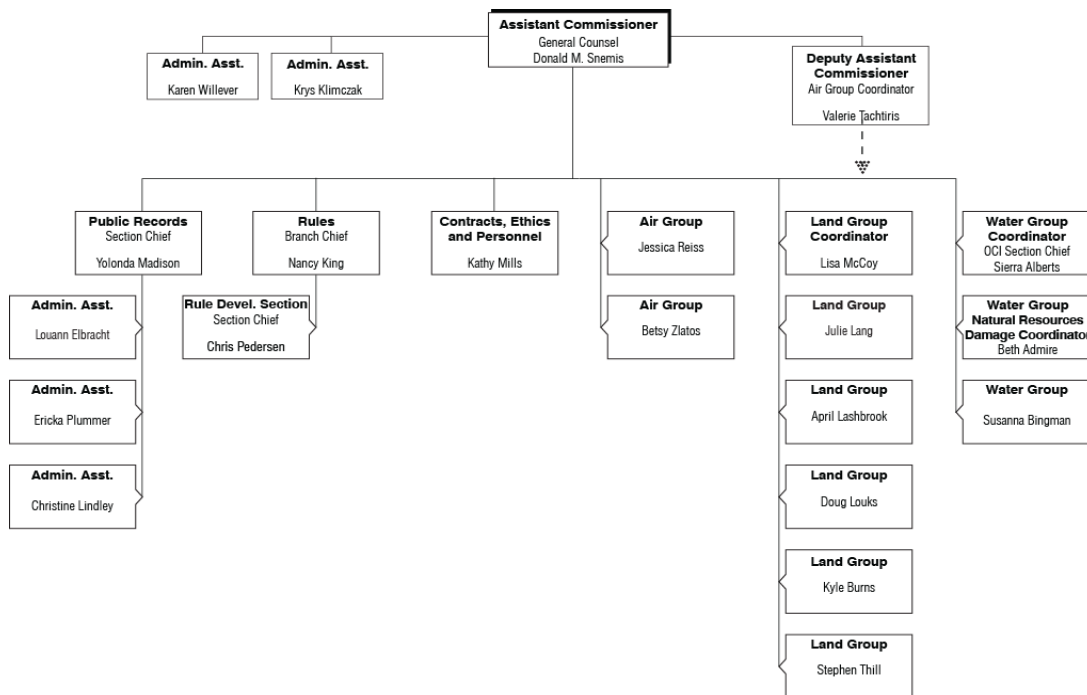
Waters of the United States

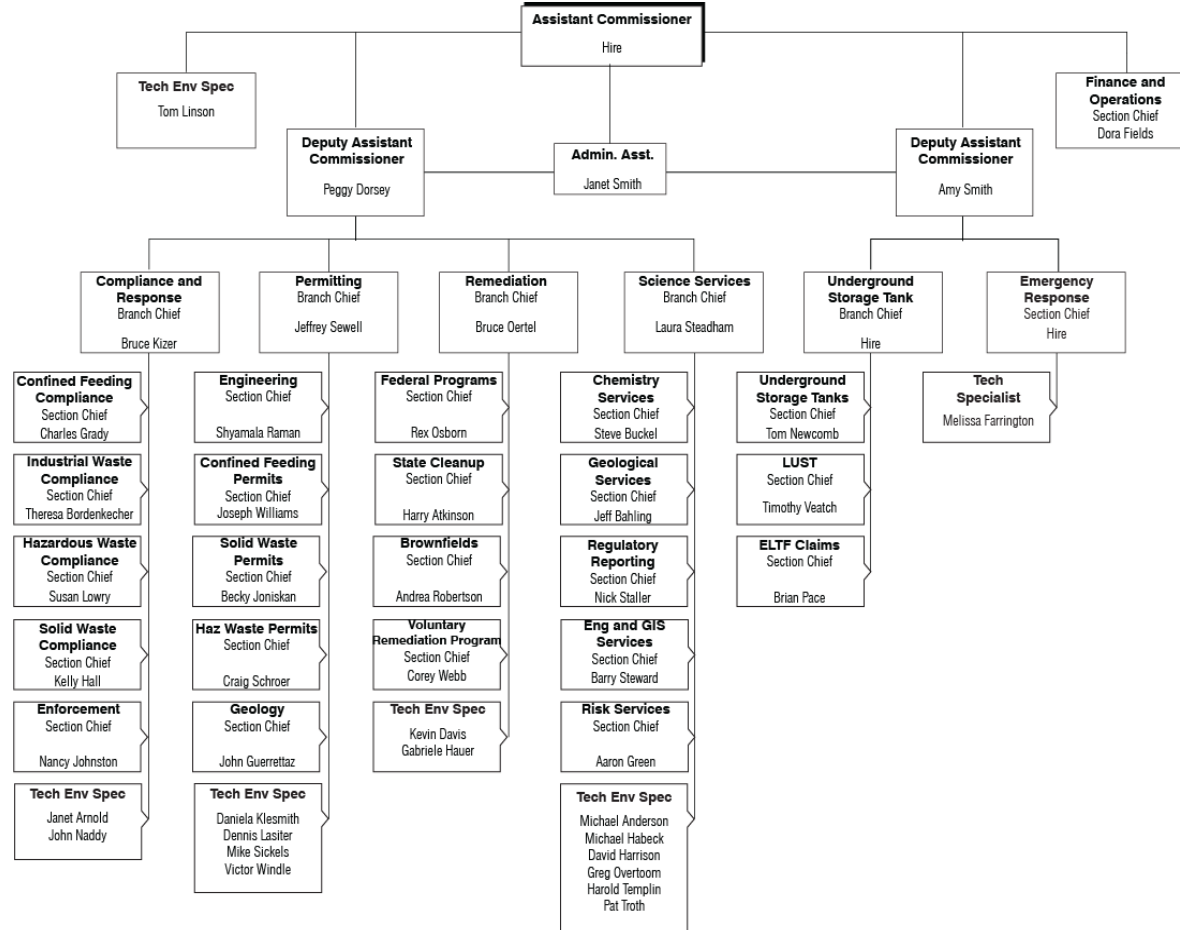
“Accordingly, on due review of the relevant considerations in light of the briefs filed by petitioners, respondents and intervenors, and in the exercise of our discretion, we GRANT petitioners’ motion for stay. The Clean Water Rule is hereby STAYED, nationwide, pending further order of the court.”

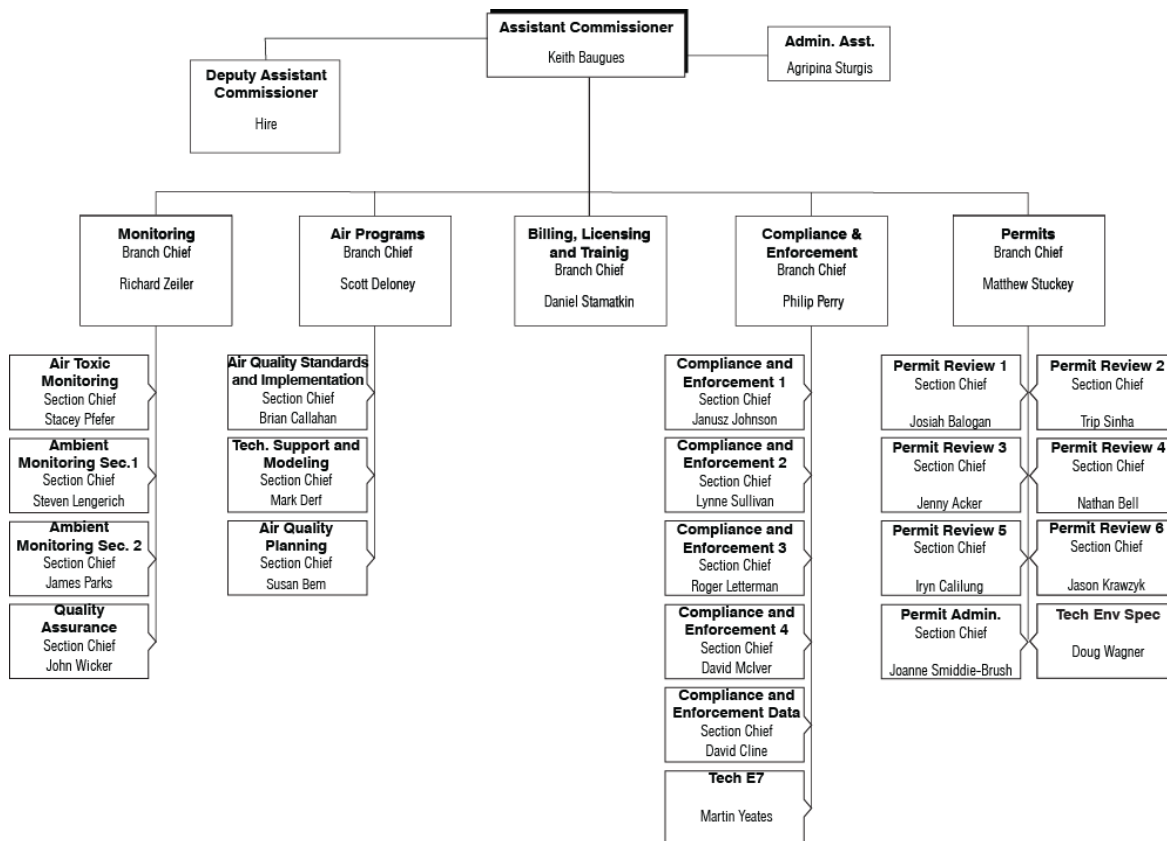
In re: Environmental Protection Agency and Department of Defense Final Rule; “Clean Water Rule: Definition of the Waters of the United States,” Sixth Circuit District Court, October 9, 2015

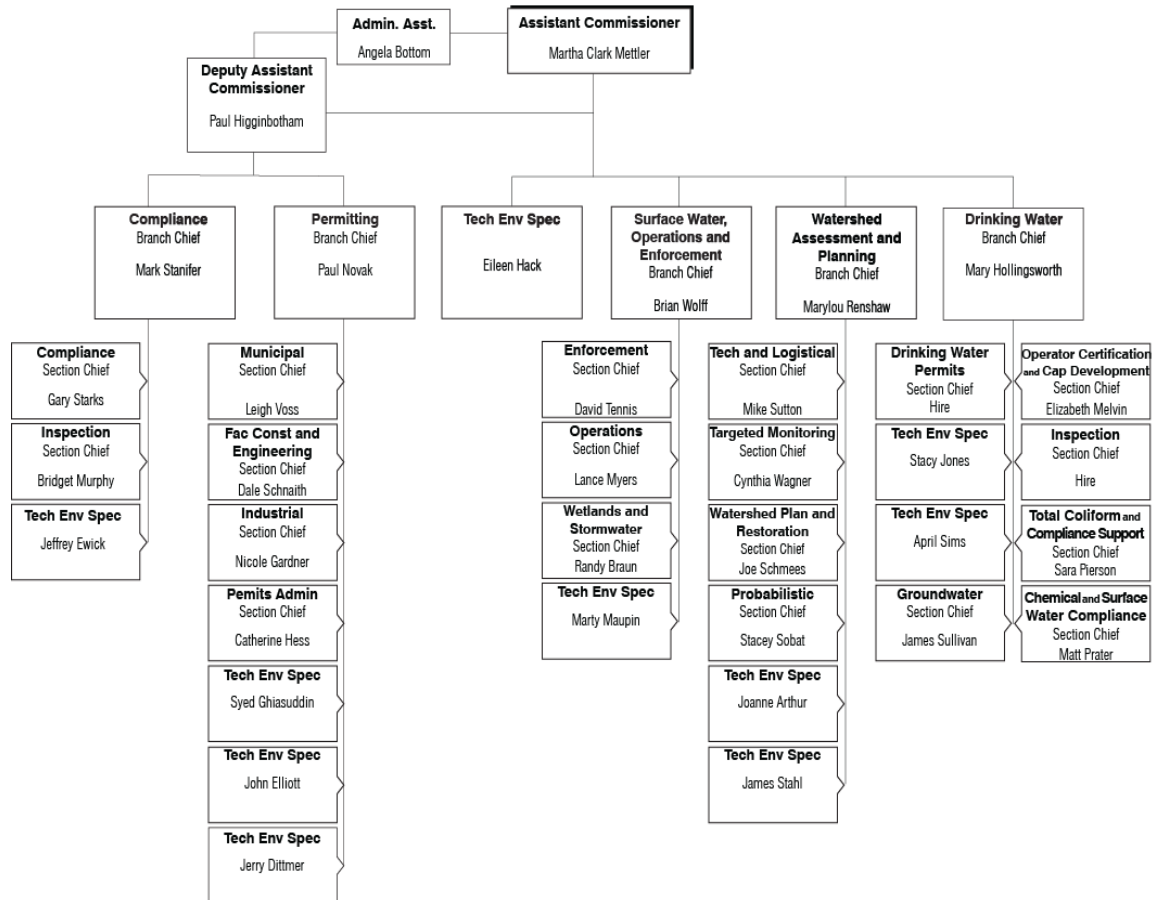
IDEM Leadership

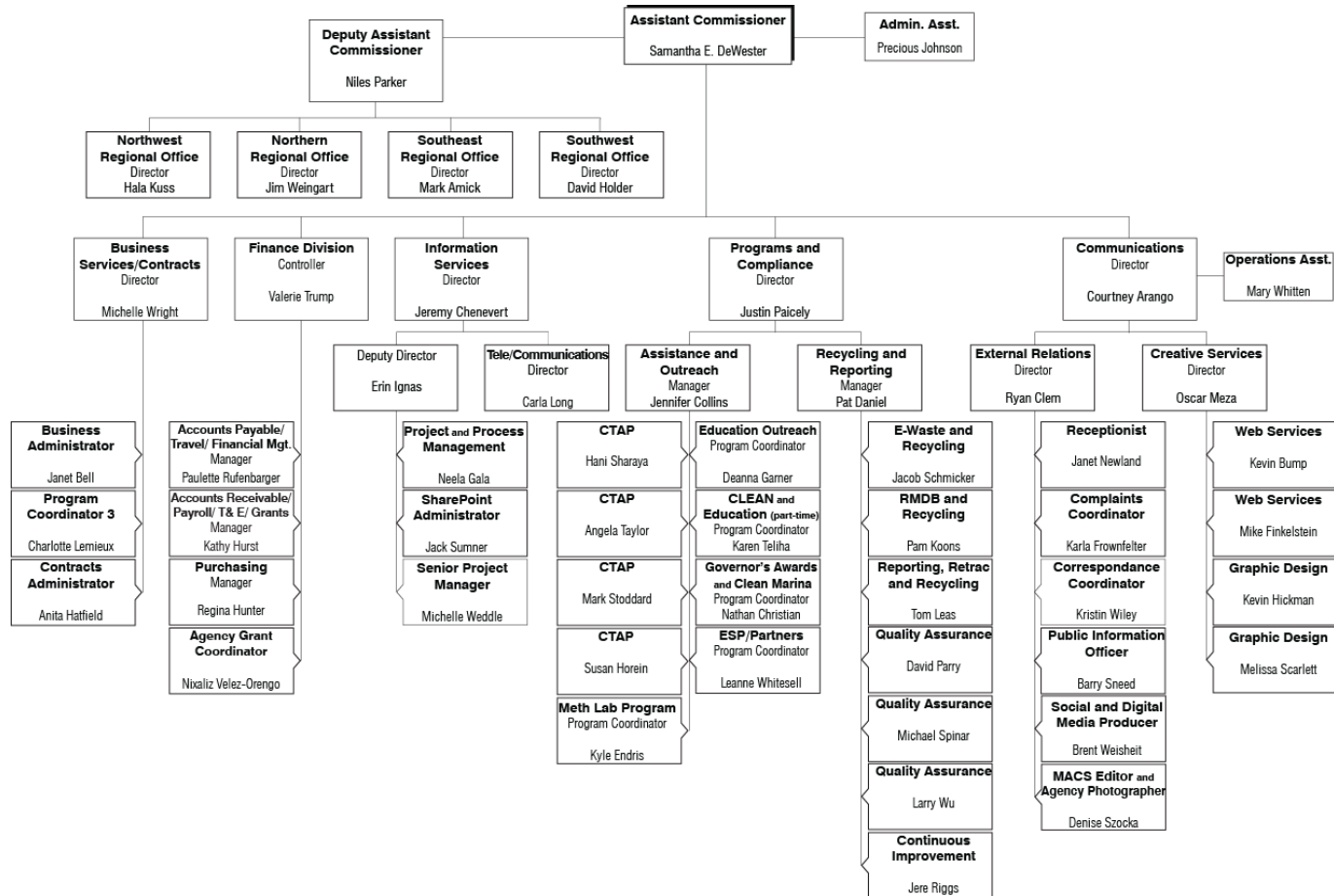












Questions?

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